Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
TiVo, Inc.)	MB Docket No. 11-105
Petition for Waiver of Sections 15.117(b), 15.118(b),)	
15.123(b)(1), 15.123(c), and 15.123(d) of the)	
Commission's Rules)	
)	

MEMORANDUM OPINION AND ORDER

Adopted: August 9, 2013 Released: August 9, 2013

By the Chief, Media Bureau:

I. INTRODUCTION

1. In this Order, we grant TiVo, Inc.'s ("TiVo") unopposed request for waiver of the Federal Communications Commission's ("Commission") analog tuner requirements to allow TiVo to sell all digital video recorders ("DVRs"), including ones that receive digital broadcast and cable service, as well as ones that receive only digital cable service. First, we waive the requirement that all devices that can receive any over-the-air television broadcast channels must be able to receive all such channels. Second, we waive the requirement that electronics equipment marketed as "digital cable ready" include tuners that are capable of tuning analog cable channels. We conclude that the waiver is in the public interest because it will reduce the cost and power consumption of TiVo DVRs and provide consumers with a retail set-top box option that can better compete with devices leased by cable operators, thus enhancing competition in the retail set-top box market. In addition, to avoid possible consumer confusion

¹ See 47 C.F.R. § 15.117(b) (requiring all television broadcast receivers to "be capable of adequately receiving all channels allocated by the Commission to the television broadcast service").

² See 47 C.F.R. § 15.118(b) (requiring cable ready equipment to "be capable of receiving all NTSC or similar video channels on channels 1 through 125"). NTSC refers to the National Television System Committee broadcasting standard, which is the standard used by cable systems and certain low-power, Class A, and translator over-the-air stations to transmit analog signals. In its petition, TiVo also seeks waiver of (1) Section 15.123(b)(1), which requires all unidirectional digital cable products to be capable of tuning NTSC channels transmitted in the clear; (2) Section 15.123(c), which outlines tests and standards that unidirectional digital cable products must satisfy before going to market; and (3) Section 15.123(d), which requires manufacturers and importers of unidirectional digital cable products to inform consumers that the device is "capable of receiving analog basic . . . cable television programming." TiVo Petition at 1 (citing 47 C.F.R. §§ 15.123(b)(1), 15.123(c), 15.123(d)). As TiVo states in its petition, the D.C. Circuit recently vacated the Order that adopted Section 15.123. TiVo Petition at 2, n.4 (citing *EchoStar Satellite, L.L.C. v. FCC*, 704 F.3d 992 (D.C. Cir 2013)). The court issued the mandate in that case on March 13, 2013. Because Section 15.123 is thus vacated, we consider that portion of TiVo's request moot.

about the devices' capabilities and limitations, we condition this waiver on TiVo's continued commitment to clearly state on consumer and retail education materials that the devices (i) receive neither analog overthe-air broadcast channels nor analog cable channels, or (ii) receive no over-the-air broadcast channels, as appropriate.

II. BACKGROUND

2. The All Channel Receiver Act of 1962 grants the Commission the "authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting when such apparatus is shipped in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public." The Commission first exercised this authority in 1962 by adopting Section 15.70(a) of the Commission's rules. The successor to this rule, now codified at Section 15.117(b), states that "TV broadcast receivers shall be capable of adequately receiving all channels allocated by the Commission to the television broadcast service." A "TV broadcast receiver" is defined as a "device designed to receive television pictures that are broadcast simultaneously with sound on the television channels authorized under part 73 of this chapter. For purposes of this rule, the term "TV broadcast receivers" includes "devices, such as TV interface devices and set-top devices that are intended to provide audio-video signals to a video monitor, that incorporate the tuner portion of a TV broadcast receiver and that are equipped with an antenna or antenna terminals that can be used for off-the-air reception of TV broadcast signals, as authorized under part 73 of this chapter." The purpose of this rule

³ 47 U.S.C. § 303(s); the All Channel Receiver Act of 1962, Pub. L. No. 87-529, 76 Stat. 150. *See also* S. Rep. 1526, 87th Cong., 2nd Sess. 1962 *reprinted at* 1962 U.S.C.C.A.N. 1873, 1875 (discussing "the relative scarcity of television receivers in the United States which are capable of receiving the signals of UHF stations" (only about 16%), which "prevents effective competition between UHF and VHF stations which operate in the same market").

⁴ All-Channel Television Broadcast Receivers, 27 Fed. Reg. 11,698, 11,700 (Nov. 28, 1962); 47 C.F.R. § 15.70(a) (1962) (current version at 47 C.F.R. § 15.117(b)) ("[a]ll television broadcast receivers manufactured after April 30, 1964, and shipped in interstate commerce or imported from any country into the United States, for sale or resale to the public, shall be capable of adequately receiving all channels allocated by the Commission to the television broadcast service.").

⁵ See Revision of Part 15 of the Rules regarding the operation of radio frequency devices without an individual license, 4 FCC Rcd 3493, 3517, ¶ 139 (1989) (adopting 47 C.F.R. § 15.117(b)). Based on a prior Commission statement, it is arguable that this rule does not require a digital television receiver to receive analog signals. Advanced Television Systems And Their Impact Upon The Existing Television Broadcast Service, Fifth Report and Order, 12 FCC Rcd 12809, 12855-6 (1997) ("We do not believe that our goals would be advanced by mandating that all digital receivers receive and display NTSC signals and DTV signals, regardless of format, aspect ratio, or progressive or interlaced scanning, as broadcasters argue. We expect that equipment manufacturers will make available to consumers digital receivers that receive both NTSC and DTV signals. However, we will not preclude equipment manufacturers from designing digital receivers that do not receive NTSC signals."). However, on its face, Section 47 C.F.R. § 15.117(b) requires a television broadcast receiver to be able to receive "all channels allocated by the Commission to the television broadcast service." 47 C.F.R. § 15.117(b); see also Office of Engineering and Technology Laboratory Division Knowledge Database (available at https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?switch=P&id=42863), Publication Number 218634 (rel. Dec. 17, 2009) (confirming Section 15.117(b)'s dual ATSC/NTSC tuner requirement). Thus, given the counter-argument that the rule does require digital television receivers to receive analog signals, we proceed in this Order as if a waiver were required.

⁶ 47 C.F.R. § 15.3(w).

⁷ 47 C.F.R. § 15.117(a).

was to ensure that television broadcast receivers receive all television broadcast channels irrespective of the channel's place in the broadcast spectrum.⁸

- 3. Section 624A directs the Commission to adopt regulations to assure compatibility between consumer electronics devices and cable systems in order to make electronics equipment manufacturers more likely to offer innovative cable-ready devices for sale, and consumers more likely to purchase them. In May 1994, pursuant to the directive of Section 624A, the Commission adopted rules to encourage compatibility between consumer electronics devices and cable service. As part of those rules, the Commission adopted a requirement that "cable ready" receivers be able to tune analog cable channels up to channel 125. The Commission explained that this requirement was practical and inexpensive, as cable channel 125 corresponded with the highest UHF broadcast channel that TVs are required to tune, and that analog compatibility "will minimize the need to use set-top converters for tuning purposes." This rule, codified at Section 15.118(b) of the Commission's rules, ensures that devices marketed as "cable ready" for sale at retail are able to tune the overwhelming majority of cable channels transmitted in analog.
 - 4. On September 7, 2011, the Media Bureau granted TiVo a waiver of Section 15.118(b) for

⁸ All-Channel Television Broadcast Receivers, 27 Fed. Reg. 11,698 (Nov. 28, 1962). When the Commission defined a TV broadcast receiver to include "TV interface devices and set-top devices that are intended to provide audio-video signals to a video monitor," it was focused on whether those devices should include digital broadcast receivers because of the impending DTV transition, rather than whether devices should include analog broadcast receivers. *See Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, 17 FCC Rcd 15978, 15995-15999, ¶¶ 39-46 (2002) ("Consistent with the intent of Congress that we not use our authority under the ACRA to set broad standards for television receivers, we believe that the rules implementing the DTV tuner requirements should avoid imposing new performance standards on DTV except as necessary to ensure that receivers can adequately tune DTV signals on all of the television channels."). This context informs our analysis of the public interest benefits below.

⁹ 47 U.S.C. § 544a.

¹⁰ Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992 Compatibility between Cable Systems and Consumer Electronics Equipment, 9 FCC Rcd 1981 (1994) ("Analog Plug and Play Order"). The term "plug and play" refers to a device's ability to plug into a cable system and receive cable programming without a cable-operator provided set-top box.

¹¹ *Id.* at 1995-7, ¶¶ 78-90. ("[W]e will require 'cable ready' TV receivers and VCRs to tune to cable channels specified by the EIA IS–132 standard up to a minimum frequency range of 806 MHz."). 806MHz corresponds to channel 125 on cable systems under the EIA IS-132 standard. *See* Electronic Industry Association's "Standard Cable Television Channel Identification Plan, IS–132, May 1994" (EIA IS–132).

¹² Analog Plug and Play Order, 9 FCC Rcd at 1996, ¶ 89 ("Inasmuch as TV receivers normally incorporate a single tuner for both cable and broadcast channels and the appropriate upper range for cable is essentially the same as the existing broadcast tuning requirement, we believe it would be appropriate to adopt the minimum tuning range for broadcast channels as the upper cable channel tuning requirement for 'cable ready' equipment.").

¹³ This rule does not apply to boxes that cable operators lease to their subscribers. The Commission adopted the rule pursuant to Section 624A, which was enacted to ensure that cable signal theft protection techniques do not interfere with the advanced functions of retail television equipment or inhibit future innovations applicable to retail devices. 47 U.S.C. § 544a; *Analog Plug and Play Order*, 9 FCC Rcd at 1981-1984, ¶ 1-16. As the Bureau has stated, "[d]evices that cable operators deploy directly to their subscribers are not subject to the requirement[] of Section 15.118(b) . . . as cable operators are familiar with the specific technical requirements for compatibility within each of their systems and subscribers do not expect those devices to receive over-the-air broadcast service." *TiVo, Inc.*, 26 FCC Rcd 12743, 12745, n.16 (MB 2011).

its Premiere Elite product line, allowing it to market and sell Premiere Elite DVRs that have only digital cable tuners. He Bureau concluded that waiver "will reduce the Premiere Elite's cost and power consumption and provide consumers a new retail set-top box option that will compete with devices leased by cable operators. The Bureau conditioned the waiver "on TiVo's commitment to inform consumers and retailers about the capabilities and limitations of this digital device, "he which the Bureau concluded was necessary "to ensure that consumers are not misled and that only consumers who subscribe to all-digital cable service, or who have adequate knowledge and notice of the device's inherent limitations, purchase the Premiere Elite."

On February 4, 2013, TiVo filed a request for waiver of the Commission's tuner 5. requirements with respect to all of its products to allow it to sell DVRs that receive digital over-the-air signals and digital cable signals, as well as DVRs that can receive only digital cable service, such as the Premiere Elite. 18 To support its request, TiVo argues that "vestigial analog tuners . . . increase costs and power consumption without providing any useful functionality for consumers." TiVo emphasizes that full-power broadcasters transmit only in digital and that the Commission set a deadline of September 1, 2015 for all other television broadcasters to cease analog transmissions. 20 It states that including analog tuners "increases the retail price of each device by between \$100 and \$150 depending on the model."²¹ And it argues that the rule puts TiVo devices at a competitive disadvantage compared to set-top boxes leased by multichannel video programming distributors, because the Commission's rules do not require leased set-top boxes to include analog tuners.²² TiVo also argues that waiver will help fulfill the Commission's policy of promoting compatibility between devices and cable service because TiVos are compatible with digital cable service.²³ Moreover, to assist in preventing consumer confusion, TiVo commits to continue consumer education efforts to ensure that consumers are clear about the features and limitations of its devices. 24 On March 18, 2013, the Media Bureau released a Public Notice seeking

¹⁴ *TiVo, Inc.*, 26 FCC Rcd 12743 (MB 2011). The Premiere Elite is now marketed as Premiere XL4. *See* Letter from Gary S. Lutzker, Counsel to TiVo, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, MB Docket No. 11-105 (April 23, 2012).

¹⁵ TiVo, Inc., 26 FCC Rcd 12743, ¶ 1 (MB 2011).

¹⁶ *Id*.

¹⁷ *Id.* at 12748, ¶ 10.

¹⁸ TiVo Inc.'s Petition for Waiver of Section 15.118(b), 15.123(b)(1), and 15.123(c) of the Commission's Rules, MB Docket No. 11-105 (filed Feb. 4, 2013) ("Waiver Request"). TiVo made its request pursuant to Sections 1.3 and 76.7 of the Commission's rules. Because Section 76.7 provides for waiver of "any provision of this part 76," but does not cover other rule sections, such as part 15 rules, we consider TiVo's petition pursuant to Section 1.3 of the Commission's rules, which provides authority to waive any of the Commission's rules. 47 C.F.R. §§ 1.3, 76.7.

¹⁹ Waiver Request at 1.

²⁰ *Id.* at 3-5.

²¹ *Id*. at 7.

²² *Id.* at 4, 8-9.

²³ *Id.* at 11-13.

²⁴ The consumer-education program includes labeling, marketing, and retailer education. With respect to the products for which TiVo has already received a waiver, TiVo informs customers and retailers that the devices can tune only digital signals and explains that this limitation means that consumers cannot use TiVo devices to receive any analog over-the-air television or analog cable television signals, as appropriate. *See TiVo, Inc.*, 26 FCC Rcd

comment on TiVo's request for waiver. No parties opposed TiVo's request.²⁵

III. DISCUSSION

- 6. We find good cause to grant TiVo's request for waiver subject to TiVo's continued commitment to consumer education about the capabilities and limitations of TiVo's devices. Waiving the analog tuner requirements will have a *de minimis* effect on consumers because the television sets to which TiVo's products connect are required under Commission rules to have analog tuners²⁷ that TiVo customers can use to receive any analog broadcast or cable channels that they wish to receive. Moreover, waiver of the Commission's rules in this instance should provide TiVo's devices regulatory parity with MVPD-leased set-top boxes with which they compete, Peduce power consumption, and further the Congressional goal of assuring a retail market for devices that can access cable programming because this waiver will allow TiVo to offer a less expensive, digital cable-compatible DVR. Furthermore, the Commission adopted these rules before the invention of the DVR. The record reflects that an all-digital DVR is likely to appeal to consumers who would otherwise lease set-top boxes from their cable operators. For these reasons, we grant TiVo's request for waiver.
- 7. We find that TiVo presents unique, specific benefits to support its waiver request. As noted above, the Commission's rules do not require that the all-digital set-top boxes that cable operators lease to their subscribers include analog tuners, and therefore TiVo is at a competitive disadvantage against its main competitors.³² As TiVo explains in its waiver request, including "analog functionality

12743, 12745, 12748. ¶¶ 5, 11 (MB 2011). TiVo will undertake these same efforts with respect to the products at issue in the instant waiver proceeding.

²⁵ The only response to the Public Notice was a filing entitled "Reply Comments" that TiVo filed on April 18, 2013, to reiterate their arguments and to highlight that no parties filed in opposition to its request.

²⁶ Section 1.3 of the Commission's rules states that "[t]he provisions of this chapter may be suspended, revoked, amended, or waived for good cause shown, in whole or in part, at any time by the Commission, subject to the provisions of the Administrative Procedure Act and the provisions of this chapter. Any provision of the rules may be waived by the Commission on its own motion or on petition if good cause therefor is shown." 47 C.F.R. § 1.3.

²⁷ 47 C.F.R. §§ 15.3(w); 15.117(a), (b).

²⁸ Waiver Request at iii, 12-13. TiVo states in its Waiver Request that it tracked consumer response to the previous waiver it received, and only 0.2 % of subscribers commented to TiVo about the absence of analog tuning ability, and only 0.05% of customers cancelled their subscriptions as a result. Waiver Request at ii.

²⁹ Most other devices with digital tuners, like television sets, do not compete directly with cable set-top boxes because their main function is not receipt of cable service. TiVo DVRs, on the other hand, compete directly with "all-digital DVRs without analog tuning capability." Waiver Request at ii.

³⁰ As discussed *supra*, ¶ 2, the Commission adopted Section 15.70(a), the predecessor to 15.117(b), in 1962 (and moved this provision to its current section in the rules in 1989) and adopted 15.118(b) in 1994; the DVR was not introduced until the late 1990s. *See* John Markoff, *Netscape Pioneer to Invest in Smart VCR*, N.Y. TIMES, Nov. 9, 1998, *available at* http://www.nytimes.com/1998/11/09/business/netscape-pioneer-to-invest-in-smart-vcr.html?src=pm.

³¹ *Id.* at 3-4; 47 U.S.C. § 549. We note that TiVo reports that only 0.05% of customers cancelled their subscriptions as a result of the lack of analog functionality, and that a waiver will reduce the cost of its devices by up to \$150. Waiver Request at ii. On balance, we believe that the benefit of the cost savings outweighs the burden imposed on a small number of consumers, particularly given the other options those consumers have to receive analog signals.

³² Waiver Request at 2-4.

increases the retail price of each device by between \$100 and \$150 depending on the model." In addition, TiVo's main supplier of analog tuning components is phasing out its production of analog tuners, which demonstrates that the market for analog tuners is declining. Finally, these all-digital devices will be more energy efficient, and the lower price may prove more enticing to consumers. Accordingly, the availability of such devices could encourage consumers to transition to this more efficient all-digital technology. Moreover, the benefits that will result from waiver establish that deviation from the general rules will serve the public interest better than strict adherence to them. When viewed in light of TiVo's education and marketing commitments that we discuss below, we conclude that these tangible consumer benefits will be realized with *de minimis* burden to consumers.

As discussed above, the Commission adopted Section 15.117(b) to ensure that television broadcast receivers are "capable of adequately receiving all channels allocated by the Commission to the television broadcast service."³⁷ All full-power television is now broadcast in digital and the Commission has set a deadline of September 1, 2015 for all other television broadcasters to cease analog transmissions.³⁸ Therefore, the overwhelming majority of broadcast viewers currently view only digital broadcast signals, and after the low-power digital transition, broadcast viewers will receive only digital broadcast signals. We find it significant that there was no opposition to the waiver by low-power broadcasters, the only group of television broadcasters still transmitting analog signals which arguably could be impacted by the grant of this waiver. Nonetheless, we have carefully considered the potential impact on the remaining NTSC Class A and LPTV licensees and their viewers. We find that although TiVo's DVRs are "television broadcast receivers" that are subject to the rule, they are unusual because a consumer generally must connect a TiVo DVR to a television set to view the programming that the TiVo receives and records. Therefore, as TiVo correctly points out, those viewers that currently view low power signals will not be left stranded by the grant of TiVo's requested waiver because people "who have not yet made the transition to digital may still rely on the analog tuning functionality required to be included in the television sets they already own" to view analog low-power broadcast stations and analog cable channels.³⁹ Accordingly, we believe that this waiver will cause minimal inconvenience and disruption to consumers.40

³³ *Id*. at 7.

³⁴ *Id*. at 4.

³⁵ Id. at 1, 11-13. See Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission's Rules, 27 FCC Rcd 10217, 10229, ¶ 24 (explaining that each channel "carried in analog occupies 6 MHz of bandwidth that the cable operator could otherwise use for 10-12 standard definition ('SD') digital streams, 2-3 HD video streams, or significant broadband capacity").

³⁶ Northeast Cellular Tel. Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("[W]aiver is appropriate only if special circumstances warrant a deviation from the general rule and such deviation will serve the public interest.").

³⁷ 47 C.F.R. § 15.117(b).

³⁸ 47 C.F.R. § 74.731(l). Notably, we received no comments from analog broadcasters in response to TiVo's Waiver Request.

³⁹ Waiver Request at iii. *See also supra* note 8 (noting that the Commission's concern in applying the tuner mandate to a broad class of television broadcast receivers was focused on the impending DTV transition and receipt of digital broadcast channels rather than receipt of analog broadcast channels).

⁴⁰ We recognize that a consumer will need to select a different input on his or her television set to change from the TiVo input to the antenna input. Because this can be performed with the click of a single button on the TiVo remote, we believe that the inconvenience and disruption to consumers will be minimal. *See What do the buttons on*

As discussed above, the Commission adopted Section 15.118(b) to promote compatibility 9 between retail electronics equipment and cable services. Although the cable industry has increased the penetration of digital service significantly over the past decade, some cable systems continue to carry channels solely in analog and some consumers continue to rely on analog cable service. As mentioned above, TiVo DVRs are connected to television sets, which are required to include analog tuners, and we expect this waiver to cause minimal inconvenience and disruption to consumers.⁴¹ Nevertheless, we recognize that there remains a small subset of consumers that will need to understand the limits of the TiVo DVR. 42 Therefore, we conclude that it is important to condition this waiver on TiVo's continued consumer education campaign, just as we did in granting TiVo a waiver of the analog tuner requirements in 2011.⁴³ This condition requires TiVo to (i) provide retailers with an in-store product information data sheet and product-specific training, (ii) market primarily to consumers who receive the services that the TiVo can access, (iii) develop clear and easily understood point-of-sale disclosures that inform consumers that the product may not work if they move or change service providers, and (iv) offer a program allowing free 30 day return or exchange if the customer purchased the device with the mistaken belief that it receives analog services. 44 TiVo has demonstrated that these consumer disclosures and point-of-sale documentation have substantially minimized consumer confusion about the services that its devices receive. 45 Given TiVo's success with its past consumer-education efforts, its commitment to continue its consumer education efforts pursuant to the condition adopted here, and the pro-consumer benefits of the availability of these products, we believe that there is good cause to grant TiVo's waiver request.

IV. ORDERING CLAUSES

- 10. Accordingly, **IT IS ORDERED** that, pursuant to Section 1.3 of the Commission's rules, 47 C.F.R. § 1.3, the request for waiver of Sections 15.117(b) and 15.118(b) of the Commission's rules, 47 C.F.R. §§ 15.117(b) & 15.118(b), filed by TiVo, Inc., **IS GRANTED** subject to the conditions described above.
- 11. **IT IS FURTHER ORDERED** that the request for waiver of Sections 15.123(b)(1), 15.123(c), and 15.123(d) of the Commission's rules, 47 C.F.R. §§ 15.123(b)(1), 15.123(c) & 15.123(d), is **DISMISSED AS MOOT**.

the TiVo Premiere remote do?, TIVO.COM, http://support.tivo.com/app/answers/detail/a_id/1851 (last visited July 25, 2013) ("TV Input changes the input source on your TV. Use this button to select the input the TiVo box is connected to or to switch to other equipment like a VCR or DVD player.").

⁴¹ *Supra*, ¶ 8, n.38.

⁴² Toni Lenoir, *SNL Kagan Q4'12 Top MSO Table*, MULTICHANNEL MARKET TRENDS (SNL Kagan, Charlottesville, VA), March 12, 2013, *available at* http://www.snl.com/interactivex/article.aspx?ID=17175069 ("The migration toward digital continues with our group of 60 operators averaging a digital penetration of basic subs of 84.3%.").

⁴³ TiVo, Inc., 26 FCC Red 12743, 12747-8, ¶ 9 (MB 2011).

⁴⁴ See TiVo, Inc., 26 FCC Rcd 12743, 12745, ¶ 5 (MB 2011) (citing Letter from Gary S. Lutzker, Counsel, TiVo, Inc. to Marlene H. Dortch, Secretary, Federal Communications Commission, MB Docket No. 11-105 (filed August 10, 2011); Letter from Gary S. Lutzker, Counsel, TiVo, Inc. to Marlene H. Dortch, Secretary, Federal Communications Commission, MB Docket No. 11-105 (filed August 15, 2011)).

⁴⁵ Waiver Request at 6, 11-13.

12. This action is taken pursuant to authority delegated by Section 0.283 of the Commission's rules, 47 C.F.R. § 0.283.

FEDERAL COMMUNICATIONS COMMISSION

William T. Lake Chief, Media Bureau